Complete Summary

GUIDELINE TITLE

Dementia. Nutrition management for older adults.

BIBLIOGRAPHIC SOURCE(S)

Ham R. Dementia. Nutrition management for older adults. Washington (DC): Nutrition Screening Initiative (NSI); 2002. 10 p. [45 references]

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

- Dementia, including Alzheimer´s disease and other causes of dementia
- Nutritional complications related to dementia

GUIDELINE CATEGORY

Evaluation
Management
Screening

CLINICAL SPECIALTY

Family Practice
Geriatrics
Internal Medicine
Nutrition
Psychiatry
Psychology
Speech-Language Pathology

INTENDED USERS

Advanced Practice Nurses
Dietitians
Health Care Providers
Hospitals
Nurses
Occupational Therapists
Pharmacists
Physical Therapists
Physicians
Psychologists/Non-physician Behavioral Health Clinicians
Social Workers
Speech-Language Pathologists

GUIDELINE OBJECTIVE(S)

To provide nutrition screening and intervention strategies for dementia that will enhance disease management and health care outcomes and positively impact individual health and quality of life of older adults.

TARGET POPULATION

Older adults with dementia

INTERVENTIONS AND PRACTICES CONSIDERED

Nutrition Screening

1. Measurement of body weight and height and calculation of body mass index (BMI)
2. Assessment of cognitive status, emotional/mental status, functional status
3. Evaluation of food and fluid intake
4. Evaluation of alcohol use
5. Evaluation of serum albumin level
6. Evaluation of current medications/dietary supplements
7. Assessment of aspiration risk

Nutrition Interventions

1. Maintenance of reasonable weight
2. Provision of sufficient calories and nutrients
3. Use of creative feeding techniques and other techniques to maximize food intake
4. Selecting food of appropriate consistency
5. Minimizing choking/aspiration risks
6. Providing assistance in feeding
7. Use of structures or invasive methods
8. Development of methods for confronting ethical issues when patients refuse to eat or drink

MAJOR OUTCOMES CONSIDERED

- Impact of dementia on nutritional status (e.g., body weight, lean body mass, body fat, food intake)
- Impact of dementia on health services utilization and costs
- Impact of nutritional interventions on food intake and patient quality of life

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Not stated

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Not stated

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Informal Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Professionals with expertise in nutrition, medicine, and allied disciplines served as authors and reviewers.

The information in A Physician´s Guide to Nutrition in Chronic Disease Management for Older Adults-Expanded Version is derived from The Role of Nutrition in Chronic Disease Care, a 1997 Nutrition Screening Initiative (NSI)

publication. The authors updated their 1997 work through an extensive review of the literature, using evidence-based data where possible and consensus-based information when definitive outcomes were not available.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

In patients with mild to moderate dementia, numerous behavioral interventions have been shown to increase food intake, facilitate weight maintenance, and improve quality of life. Patients are able to maintain function, strength, and energy for longer periods of time, thus reducing the burden and costs of care for staff members and family caregivers.

METHOD OF GUIDELINE VALIDATION

External Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

An interdisciplinary advisory committee of nationally recognized practitioners in medicine, nutrition, and geriatrics reviewed the chapter related to their area of expertise.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Nutrition Screening Guidelines

At a minimum, nutrition screening in patients with dementia should include the following:

- Measurement of body weight, calculation of body mass index (BMI) at each office visit (BMI 22 to 27, or weight within the normal range on standard weight-for-height tables)
- Measurement of height (annually in those age 65 years and older) estimated from forearm length if there is height loss from osteoporosis
- Assessment of cognitive status
- Assessment of emotional/mental status
- Assessment of functional status
- Evaluation of food and fluid intake
- Evaluation of alcohol use
- Evaluation of serum albumin level
- Evaluation of current medication use (including over-the-counter [OTC] and dietary supplements)
- Assessment of aspiration risk

- The use of the Nutrition Screening Initiative's (NSI) Level II Screen provides a mechanism to assess the majority of the elements identified above. The Level II Screen can be an invaluable starting point in the identification and treatment of nutritional risk factors associated with dementia (see appendices in the original guideline document).

Nutrition Intervention Guidelines

Nutrition interventions in people with dementia should address the following:

- Maintain a reasonable weight (BMI 22 to 27).
- Provide sufficient calories and nutrients to meet the needs of the individual. Persons with Alzheimer´s disease (AD) can maintain their weight if fed a diet adequate in energy (35 kcal/kg/day).
- Use creative feeding techniques designed to address specific eating-related behavioral problems.
- Select foods of appropriate consistency.
- Minimize choking/aspiration risk.
- Allow adequate time for eating (30-45 minutes/meal).
- Maximize food intake during lunch when cognition is usually best.
- Offer the use of structured or invasive feeding methods as dementia progresses.
- Provide assistance in feeding when appropriate.
- Develop methods for confronting ethical issues when patients refuse to eat or drink.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is not specifically stated for each recommendation.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Benefits of Nutrition Management to Patients

A number of creative feeding interventions have been developed to address the nutritional needs of patients with dementia. One study describes the development of a 5 meal-a-day regimen consisting of finger foods and other items that patients can more readily eat without feeding assistance or utensils. Following introduction of this intervention, 7 out of 10 patients improved their food intake and gained weight. Mealtimes were more enjoyable for patients, families, and staff, and

mealtime safety was enhanced. Quality of life and self-esteem improved as adult patients were able to regain some autonomy during meal times.

The Alzheimer's Association "business card" that can be given to a waiter at a restaurant is another example of a creative behavioral intervention that can be used by people coping with an individual with early dementia. Emphasis is placed on selecting a "slow" time at the restaurant, informing the waiter of the individual's special needs, and arranging as much of the meal as possible in advance. Eating out is a major social occupation for most Americans. By using this strategy, the patient who is able to benefit from social cues and a familiar dining environment away from home will still be able to do so.

The provision of music during mealtimes (familiar tunes from their youth in the 1920s and 1930s) improved food intake in patients with dementia and increased the quantity of food served to patients by the food service staff. Patients were also less irritable, anxious, and depressed during the periods when music was played.

When elderly patients with Alzheimer´s disease and other types of dementia are fed diets with adequate calories to meet their energy needs (35 kcal/kg/day), they are able to maintain a reasonable weight (body mass index 22 to 27). Survival rates in patients with dementia who were able to maintain body weight and nutrient intake were equivalent to those for nondemented institutionalized elders.

In elderly nursing home patients with severe cognitive impairment in whom feeding tubes were placed, there was no survival benefit when compared to similar patients who were not tube fed. Only 33% of nursing home patients would choose to be tube fed if they could no longer eat due to impaired cognition, citing prolonged survival as their major reason for accepting tube-feeding placement.

The need for early definition of the patient´s desires in terms of life maintenance, when very dependent or impaired, including the provision of nutritional support, while the patient can still provide meaningful input, is emphasized by these considerations. Health care professionals should assist families to have such discussions and to get a health care proxy or durable power of attorney appointed early in the illness. This will enable the family to make decisions concordant with the patient´s desires and culture when the patient loses competency for such decisions.

POTENTIAL HARMS

Not stated

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

Health care professionals must decide how best to implement these recommendations in multiple settings and in patients with diverse needs. It is essential to develop a habitual approach to the nutrition screening and

assessment of nutritional status in older adults, and develop policies, protocols, and procedures to ensure the implementation of disease-specific nutritional interventions. The reader should refer to other Nutrition Screening Initiative (NSI) materials for additional information and to facilitate a systematic approach to nutritional care. NSI screening tools are included as appendices of the original guideline document -- DETERMINE Your Nutritional Health Checklist and Levels I and II Screens. The Checklist was developed as a self-administered tool designed to increase public awareness of the importance of nutritional status to health and to encourage older people to discuss their own nutritional status with their primary provider. Based on this guided discussion, the provider can decide if additional screening or assessment is indicated. The Level I Screen was designed for administration by non-physician health care providers in community settings while Level II requires administration by physicians and physician-extenders that have the ability to order and interpret laboratory parameters indicative of nutritional health.

Evaluation Criteria to Document Improved Health Outcomes

Evaluation criteria which help to document the impact of nutrition screening and intervention on the patient's health and quality of life are consistent with the goals of nutrition screening and intervention for dementia. They include:

- Maintenance of a reasonable weight (body mass index [BMI] 22 to 27 for those age 65 years and older, or a weight within the desirable range on standard weight-for-height tables)
- Serum albumin $\geq$3.5 g/dl
- Optimal cholesterol (neither too high or low, especially in younger patients)
- Maintenance or improvement in bone density
- Prevention/reduction in incidence of nutrition-related co-morbidities which frequently occur in poorly nourished patients with dementia (e.g., pressure sores, hip fracture)
- Improvement of adequate food/fluid intake (percentage of nutritional needs met by food/fluid consumed daily)
- Improvement of/decreased rate of/decline in functional status
- Improvement of/decreased rate of/decline in cognitive status
- Improvement of/decreased rate of/decline in morale, behavior, or emotional status
- Improvement of social interaction/decreased social isolation

Evaluation Criteria to Document Impact of Nutrition Management on the Health Care System

In addition to the evaluation criteria listed above, the following may be used to assess the impact of nutrition screening and intervention for dementia on the health care delivery system. Reductions or improvements in these indicators could be used to document a positive impact of nutrition screening and intervention in individuals to whom routine and appropriate nutritional care is provided.

- Frequency of admission/readmission to acute care facilities
- Hospital length of stay
- Prevalence of nosocomial infection when institutionalized
- Institutionalization rates

- Pressure sore prevalence and severity

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

End of Life Care
Living with Illness

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Ham R. Dementia. Nutrition management for older adults. Washington (DC): Nutrition Screening Initiative (NSI); 2002. 10 p. [45 references]

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2002

GUIDELINE DEVELOPER(S)

American Academy of Family Physicians - Medical Specialty Society
American Dietetic Association - Professional Association
Nutrition Screening Initiative - Professional Association

GUIDELINE DEVELOPER COMMENT

The Nutrition Screening Initiative (NSI) is a partnership of the American Academy of Family Physicians (AAFP) and the American Dietetic Association (ADA). It is funded in part through a grant from Ross Products Division, Abbott Laboratories.

Additional information can be obtained from the AAFP Web site and the ADA Web site.

SOURCE(S) OF FUNDING

The Nutrition Screening Initiative (NSI) is funded in part through a grant from Ross Products Division, Abbott Laboratories.

GUIDELINE COMMITTEE

Not stated

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Primary author: Richard Ham, MD, Director, West Virginia Center on Aging, Professor of Geriatric Medicine, West Virginia University, Morgantown, WV, and formerly State University of New York Distinguished Chair in Geriatric Medicine, Syracuse, NY

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: Available from the American Academy of Family Physicians (AAFP) Web site and to members only from the American Dietetic Association (ADA) Web site.

Print copies: Not available

AVAILABILITY OF COMPANION DOCUMENTS

The following is available:

- Nutrition Screening Initiative (NSI). A physician´s guide to nutrition in chronic disease management for older adults. Washington (DC): Nutrition Screening Initiative (NSI); 2002. 18 p.

Electronic copies available in Portable Document Format (PDF) from the American Academy of Family Physicians (AAFP) Web site and the American Dietetic Association (ADA) Web site.

Electronic copies also available for download in Personal Digital Assistant (PDA) format from the American Academy of Family Physicians (AAFP) Web site.

Print copies: Available from Ross Educational Service Materials; Phone: (800) 986-8503; Web site: www.Ross.com/nsi.

PATIENT RESOURCES

The following is available:

- Managing chronic disease. Food tips if you need extra nutrients. In: Nutrition Screening Initiative (NSI). A physician´s guide to nutrition in chronic disease management for older adults. Washington (DC): Nutrition Screening Initiative (NSI); 2002. 4 p.

Electronic copies available in Portable Document Format (PDF) from the American Academy of Family Physicians (AAFP) Web site and the American Dietetic Association (ADA) Web site.

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NGC STATUS

This summary was completed by ECRI on April 16, 2004. The updated information was verified by the guideline developer on June 21, 2004.

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